

**What is claimed is:**

1. A method for modulating metabolism of pathogenic *Mycoplasma* bacteria comprising the step of contacting pathogenic *Mycoplasma* bacteria with an antibacterially effective amount of a composition comprising a gemifloxacin compound, or antibacterially effective derivatives thereof.

2. The method of claim 1 wherein said pathogenic *Mycoplasma* bacteria is selected from the group consisting of:

*Mycoplasma pneumoniae*, *M. hominis*, *M. fermentans*, *M. genitalium*, *M. penetrans* and *Ureaplasma urealyticum*.

3. A method of treating or preventing a bacterial infection by pathogenic *Mycoplasma* bacteria comprising the step of administering an antibacterially effective amount of a composition comprising a gemifloxacin compound to a mammal suspected of having or being at risk of having an infection with pathogenic *Mycoplasma* bacteria.

4. The method of claim 3 wherein said pathogenic *Mycoplasma* bacteria is selected from the group consisting of:

*Mycoplasma pneumoniae*, *M. hominis*, *M. fermentans*, *M. genitalium*, *M. penetrans* and *Ureaplasma urealyticum*.

5. The method of claim 1 wherein said modulating metabolism is inhibiting growth of said bacteria.

6. The method of claim 1 wherein said modulating metabolism is killing said bacteria.

7. The method of claim 1 wherein said contacting said bacteria comprises the further step of introducing said composition into a mammal.

8. The method of claim 3 wherein said mammal is a human.

9. The method of claim 7 wherein said mammal is a human.

10. The method of claim 1 wherein said bacteria is selected from the group consisting of: *Mycoplasma pneumoniae*, *M. hominis*, *M. fermentans*, *M. genitalium*, *M. penetrans* and *Ureaplasma urealyticum*.

11. The method of claim 1 wherein said bacteria is selected from the group consisting of: *Mycoplasma pneumoniae*, *M. hominis*, *M. fermentans*, *M. genitalium*, *M. penetrans* and *Ureaplasma urealyticum*.